THE SCIENCE AND TECHNOLOGY RESERVE PROGRAM (PROGRAM 38)

The Science and Technology Reserve Program (Program 38) provides a cadre of Naval Reserve personnel responsive to Fleet technology needs. These uniquely qualified personnel, experts in many diverse scientific and technical fields, are experienced in Fleet operations and technology applications. Program 38 personnel perform peacetime contributory support to the Chief of Naval Operations (N091 Operational T&E – Resource Sponsor), the Chief of Naval Research (CNR - Technical Sponsor), the Naval Research Laboratory (NRL), Warfare Centers and other research and development laboratories for the purpose of implementing Science and Technology solutions that improve Fleet readiness for crisis response, regional conflict and global war.

SCIENCE AND TECHNOLOGY LIAISON

The Science and Technology (S&T) Reserve Program provides liaison within and outside the Department of the Navy to accelerate the fielding of S&T solutions to operational and technical problems.

Future Naval Capabilities (FNC). Twelve FNC's have been approved by senior Naval management and the DoN S&T Corporate Board. FNC's are derived from a methodology to allocate scarce resources to those projects promising effective outcomes. FNC's feature a process to align and partner the Requirements, Acquisition and S&T communities to focus S&T investments to deliver and transition priority Naval capabilities within the FYDP. Program 38 places a high priority on projects related to the FNC's.

Sea Trial. Sea Trial is designed to constantly survey the changing frontier of technology. Once promising technologies and non-technological ideas are identified, they are incubated through a rigorous process of modeling and simulation, rapid prototyping and fleet experimentation in order to deliver next generation capabilities into the hands of the warfighter with greater speed and efficiency. NWDC serves as Sea Trial project coordinator under guidance of CFFC and works closely with Program Executive Offices, Systems Commands, Centers of Excellence, Test and Evaluation centers and ONR to develop and test new

Sea Power 21 capabilities in Fleet Battle Experiments (FBE), Limited Objective Experiments (LOE), and other Navy and joint exercises culminating in operational deployment. Under ONR's overall guidance, Program 38 collaborates closely with NWDC to coordinate reserve support for Sea Trial experimentation of new S&T capabilities.

Naval Fleet/Force Technology Office (NFFTIO). ONR's NFFTIO forms partnerships between Joint, Navy, and Marine Corps operational commands and the S & T community. These partnerships are developed to: ensure F/F helps shape Department of the Navy (DON) investment S & T; develop teaming relationships to rapidly demonstrate and transition technology; support development of technology-based capability options for naval forces; enable warfighting innovations based on technical and conceptual possibilities. Program 38 augments NFFTIO's mission by providing technical advisors with operational backgrounds for liaison with ONR and R&D laboratories on emerging military needs. Since 9/17/02 Program 38 has staffed the S & T Action Team (STAT) center providing support to NRSA's around the world.

OPNAV / ONR / NRL SCIENCE & TECHNOLOGY RESERVE PROGRAM

SCI&TECH BASE

NAVAL LABS
WARFARE CTRS
JOINT LABS
NAT'L LABS
ACADEMIA
PRIVATE ENTERPRISE



FLEET/ FORCE

SHIPS
AIRCRAFT
SPACECRAFT
WEAPONS
C4I
OPERATIONS
LOGISTICS

ChemBioRad Defense (CBRD) Technology. One Program 38 unit is fully tasked to provide CBRD-related S&T assistance to forward-deployed Naval forces. Members drill at CBDCOM, Edgewood, MD. CBRD cells of specially qualified members have also been established within other units in the Program. The Program is currently helping OPNAV staff respond to the DOD Reserve Component Weapons of Mass Destruction Consequence Management initiative, by defining the Navy's responsibility in assisting civilian authorities in the event of a National Emergency resulting from CBR attack on domestic targets.

<u>Director of Operational Test & Evaluation (CNO N091)</u>. Program 38 works with CNO N091 to support preparation of Science and Technology Requirements Guidance, which helps to set future S&T strategy for the

Navy. Members also facilitate Technology Initiative Games (TIGs), which help identify and prioritize S&T investment needs. Under MOU, Program 38 works with N096 to manage technology exchange with foreign Navies through planning, preparation, and liaison for briefings to Senior Naval Representatives of allied forces.

Advanced Concept Technology Demonstrations (ACTDs).

The sustainment of U.S. technological superiority in the face of rapid pace of technology change demands swift development, integration, and full-scale demonstrations of systems in operational environments. ACTDs are Congressionally funded multi-year projects to develop and test technology in military applications. ONR sponsors a variety of ACTD evaluations by the Fleet. Program 38 Reservists provide operational and scientific expertise to the Integrated Product Teams assigned to ACTDs. Recent work has included Joint Countermine, Precision SIGINT Targeting System, Extended Littoral Battlefield, and Portal Shield ACTDs.

Joint Services Liaison. Program 38 maintains close liaison with Air Force and Army Reserve S&T programs, and with Joint R&D laboratories and S&T offices to identify and facilitate technology projects that may meet urgent Fleet requirements in air, surface, and undersea warfare. Program 38 Reservists have participated in Fleet relevant S&T projects in weapons and sensor, command and control, and space systems at Air Force and Army laboratories.

S&T Tiger Teams. Program 38 personnel provide the Navy with the capability to quickly realize technology solutions to urgent Fleet operational requirements. Program personnel are assigned on-site (at Fleet activities or shore establishments) to projects that have potentially high benefit to urgent Fleet needs. Reservists accompany the deployment of developmental systems to Fleet elements at field sites to train Fleet forces, operate the system, and assess performance.

Classified Projects. The Naval Center for Space Technology (NCST) at NRL sponsors one of the Program 38 units. Much of the project work for NCST is performed at the Sensitive Compartmented Information (SCI) level of classification. Program Reservists work with ongoing NRL and NCST projects in the tactical application of National overhead remote sensing and signals data.

SCIENCE AND TECHNOLOGY RESERVE PROGRAM UNITS

ONR/NRL S&T HQ 100 Washington, DC ONR/NRL S&T 101 Washington, DC ONR/NRL S&T 102 Washington, DC ONR/NRL S&T 103 Washington, DC ONR/NRL S&T 104 Washington, DC ONR/NRL S&T 105 Norfolk, VA ONR/NRL S&T 106 Raleigh, NC **ONR/NRL S&T 107** Newport, RI ONR/NRL S&T 108 Chattanooga, TN ONR/NRL S&T 109 Forest Park, IL ONR/NRL S&T 110 Houston, TX ONR/NRL S&T 111 San Diego, CA ONR/NRL S&T 112 Albuquerque, NM ONR/NRL S&T 113 San Jose, CA ONR/NRL S&T 114 San Jose, CA ONR/NRL S&T 115 **Everett. WA** ONR/NRL S&T 116



Baltimore, MD

PROGRAM ORGANIZATION

The Director of the Science and Technology Reserve Program (Program 38) is CNR's technical advisor on Naval Reserve matters and employment of Program 38 personnel. The Science and Technology Reserve Program comprises 224 officer and 45 enlisted billets in 17 selected reserve (SELRES) units located throughout the United States. Officer billets are typically coded to accommodate officers from all warfare communities and officers with operational, fleet support, and technical staff experience (i.e. 1XXX). Some officer billets are specifically coded for Aviation (13XX), Aeronautical Engineering Duty (1510), Intel (1630), Oceanography (1800), and Medical Service Corps (2300). Enlisted billets call for AT, AE, AMS, HM, YN, and CTA ratings.

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Naval Science & Technology Reserve Program

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Office of Naval Research Arlington, VA October 2003